

WHAT IS CLAIMED IS:

1. An odor-absorbing or neutralizing concentrated composition useable as an additive in one, or more steps of a laundry process comprising:
 - (A) optionally, an effective amount to absorb malodors, of solubilized, uncomplexed cyclodextrin;
 - (B) optionally, an effective amount of odor blocker;
 - (C) optionally, an effective amount of class I and/or class II aldehyde;
 - (D) optionally, an effective amount of flavanoid;
 - (E) optionally, an effective amount of water soluble polymer;
 - (F) optionally, an effective amount to improve acceptance of the composition, of a solution, emulsion and/or dispersion comprising perfume in addition to said flavanoid, aldehyde and/or odor blocker;
 - (G) optionally, but preferably, an effective amount to improve the performance of the composition, of cyclodextrin compatible surfactant;
 - (H) optionally, at least about 0.01%, by weight, of a soil suspending agent selected from the group consisting of a water-soluble substituted or unsubstituted, modified or unmodified polyalkyleneimine soil suspending agent, said soil suspending agent comprising a polyamine backbone;
 - (I) optionally, when cyclodextrin is present, an effective amount, to kill, or reduce the growth of microbes, of cyclodextrin compatible and water soluble antimicrobial active;
 - (J) optionally, from about 0.01% to about 5%, by weight of the composition of low molecular weight polyol;
 - (K) optionally, from about 0.001% to about 1%, by weight of the composition of chelating agent;
 - (L) optionally, an effective amount of metallic salt, for improved odor benefit;
 - (M) optionally, an effective amount of solubilized, water-soluble, antimicrobial preservative, in addition to said antimicrobial active, to provide protection against growth of microbes;
 - (N) optionally, aqueous carrier that optionally can contain up to 20% of a lower molecular weight, water soluble alcohol,

said composition containing at least enough of ingredient (A), (B), (C) , (D), and /or (E) to provide significant reduction in malodor that survives a typical laundry wash, being essentially free of any material that would soil or stain fabric under usage conditions, having a pH of more than about 3, said composition being suitable for use as an additive in pretreating, washing,

and/or rinsing of fabrics and containing only low levels of acidic materials, and any cyclodextrin that is present being protected from compounds in the composition that would form complexes with said cyclodextrin and said composition being packaged in association with instructions to use it in at least an effective amount in at least one step in a laundry process to counteract malodors that remain after said laundry process.

2. The composition of Claim 1 wherein either:

I. said cyclodextrin is present at a level of from about 0.01% to about 60% by weight of the composition and wherein said perfume is present at a level of from about 0.003% to about 0.5% by weight of the composition and contains at least about 60%, by weight of the perfume, of perfume ingredients that have a ClogP of more than about 3 and a molecular weight of more than about 210;

II. said cyclodextrin is present at a level of from about 0.01% to about 20% by weight of the composition and wherein said perfume is present at a level of from about 0.01% to about 0.3% by weight of the composition and contains at least about 70%, by weight of the perfume, of perfume ingredients that have a ClogP of more than about 3.5 and a molecular weight of more than about 220; or

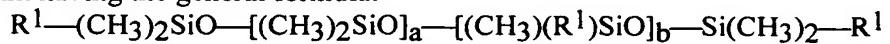
III. said cyclodextrin is present at a level of from about 0.1% to about 10%, by weight of the composition and wherein said perfume is present at a level of from about 0.05% to about 0.2%, by weight of the composition and contains at least about 80%, by weight of the perfume, of perfume ingredients that have a ClogP of more than about 3.5 and a molecular weight of more than about 220.

3. The composition of Claim 1 wherein said cyclodextrin is selected either from the group consisting of beta-cyclodextrin, alpha-cyclodextrin, gamma-cyclodextrin, derivatives of said cyclodextrins, and mixtures thereof or from the group consisting of methyl substituted cyclodextrins, ethyl substituted cyclodextrins, hydroxyalkyl substituted cyclodextrins, branched cyclodextrins, cationic cyclodextrins, quaternary ammonium cyclodextrins, anionic cyclodextrins, amphoteric cyclodextrins, cyclodextrins wherein at least one glucopyranose unit has a 3-6-anhydro-cyclomalto structure, and mixtures thereof.

4. The composition of Claim 3 wherein said cyclodextrin is either methylated beta-cyclodextrin; a mixture of methylated alpha-cyclodextrin and methylated beta-cyclodextrin; hydroxypropyl beta-cyclodextrin; or a mixture of hydroxypropyl alpha-cyclodextrin and hydroxypropyl beta-cyclodextrin.

5. The composition of Claim 1 wherein said cyclodextrin is present and said hydrophobic perfume is formed into an emulsion having particles of at least 0.01 micron in diameter before said cyclodextrin is present using a surfactant material selected from the group consisting of: cyclodextrin compatible surfactants; polymers containing both hydrophobic and hydrophilic portions; and/or cationic fabric softening actives that form stable vesicles in the desired particle size range.

6. The composition of Claim 5 wherein said surfactant material comprises siloxane surfactant having the general formula:



wherein a + b are from about 1 to about 50, and each R¹ is the same or different and is selected from the group consisting of methyl and a poly(ethyleneoxide/propyleneoxide) copolymer group having the general formula:



with at least one R¹ being a poly(ethyleneoxide/propyleneoxide) copolymer group, and wherein n is 3 or 4; total c (for all polyalkyleneoxy side groups) has a value of from 1 to about 100; total d is from 0 to about 14; total c + d has a value of from about 5 to about 150; and each R² is the same or different and is selected from the group consisting of hydrogen, an alkyl having 1 to 4 carbon atoms, and an acetyl group.

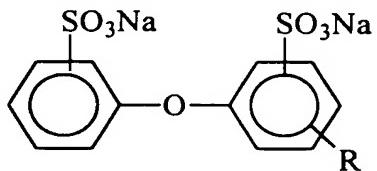
7. The composition of Claim 6 wherein in said siloxane surfactant, a + b is from about 3 to about 30; n is 3; c is from about 6 to about 100; total d is from 0 to about 3; total c + d is from about 9 to about 100; and each R² is hydrogen and/or methyl group.

8. The composition of Claim 5 wherein said surfactant material comprises block copolymer containing hydrophobic portions which monomers that are hydrophobic and hydrophilic portions which comprise monomers that are hydrophilic, said block copolymer having a molecular weight of from about 1,000 to about 1,000,000, and the ratio of hydrophilic portion to hydrophobic portion being from 20/80 to about 90/10.

9. The composition of Claim 8 wherein said block copolymer contains hydrophilic portions which comprise monomers that are hydrophilic and at least partially charged, said block copolymer having a molecular weight of from about 5,000 to about 250,000, and the ratio of hydrophilic portion to hydrophobic portion being from 30/70 to about 75/25.

10. The composition of Claim 9 wherein said block copolymer has a molecular weight of from about 10,000 to about 100,000, and the hydrophobic monomers are selected from the group consisting of: poly butyl acrylate; poly acrylamide; poly butylaminoethyl methacrylate; and/or poly octylacrylamide.

11. The composition of Claim 5 wherein said cyclodextrin compatible surfactant is selected from the group consisting of: block copolymers of ethylene oxide and propylene oxide; polyalkyleneoxide polysiloxanes; alkyldiphenyl oxide disulfonate anionic surfactant having the general formula:

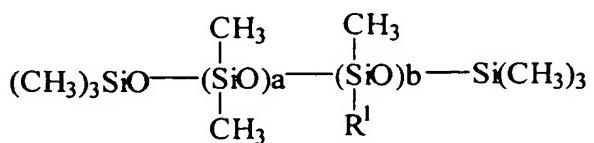


wherein R is an alkyl group; castor oil surfactant; sorbitan ester surfactant; polyethoxylated fatty alcohol surfactant; glycerol mono-fatty acid ester surfactant; polyethylene glycol fatty acid ester surfactant; fluorocarbon surfactant; and mixtures thereof.

12. The composition of Claim 11 wherein said cyclodextrin-compatible surfactant is a castor oil surfactant.

13. The composition of Claim 11 wherein said surfactant is a block copolymer of ethylene oxide and propylene oxide said block copolymer optionally the general formula $H(EO)_n(PO)_m(EO)_nH$, wherein EO is an ethylene oxide group, PO is a propylene oxide group, and n and m are numbers that indicate the average number of the groups in the surfactants, n ranges from about 2 to about 100 and m ranges from about 10 to about 100.

14. The composition of Claim 5 wherein said surfactant is polyalkyleneoxide polysiloxane having the general formula:



wherein a + b are from about 1 to about 50, and R¹ is mainly one or more random poly(ethyleneoxide/propyleneoxide) copolymer groups having the general formula:



wherein n is 3 or 4; total c (for all polyalkyleneoxy side groups) has a value of from 1 to about 100; total d is from 0 to about 14; total c+d has a value of from about 5 to about 150; and each R² is the same or different and is selected from the group consisting of hydrogen, an alkyl having 1 to 4 carbon atoms, and an acetyl group.

15. The composition of Claim 1 containing from about 0.001% to about 3% by weight of the composition of water soluble anionic polymer for improved odor control.

16. The composition of Claim 15 wherein said water soluble anionic polymer is polyacrylate at a level of from about 0.005% to about 2% by weight of the composition.

17. The composition of Claim 1 containing 0.005 to about 3% by weight of composition of water soluble zinc salt for improved odor control.

18. The composition of Claim 1 wherein said composition further comprises at least about 0.01%, by weight, of a soil suspending agent selected from the group consisting of a water-soluble substituted or unsubstituted, modified or unmodified polyalkyleneimine soil suspending agent, said soil suspending agent comprising a polyamine backbone.

19. The method of diminishing the effect of malodor that is present on fabric after a conventional washing process comprising: adding to at least one step of said washing process an effective amount of malodor counteractant selected from the group consisting of: an effective amount to absorb malodors, of solubilized, uncomplexed cyclodextrin; an effective amount to diminish the perception of malodor of odor blocker; an effective amount of to react with and reduce odor of class I and/or class II aldehyde; an effective amount of flavanoid, and/or an effective amount of water soluble polymer.

20. The method of diminishing the effect of malodor that is present on fabric after a conventional washing process comprising adding to at least one step of said washing process an effective amount of malodor counteractant comprising solubilized, uncomplexed cyclodextrin.

21. The method of diminishing the effect of malodor that is present on fabric after a conventional washing process comprising adding to at least one step of said washing process an effective amount of malodor counteractant comprising an effective amount to diminish the perception of malodor of odor blocker.

22. The method of diminishing the effect of malodor that is present on fabric after a conventional washing process comprising adding to at least one step of said washing process an effective amount of malodor counteractant comprising an effective amount of to react with and reduce odor of class I and/or class II aldehyde.
23. The method of diminishing the effect of malodor that is present on fabric after a conventional washing process comprising adding to at least one step of said washing process an effective amount of malodor counteractant comprising an effective amount of flavanoid.
24. The method of Claims 19 wherein said fabrics have a high level of hydrophobic soil.
25. The method of Claim 24 wherein said hydrophobic soil is selected from lubricating hydrocarbons including oil and grease and/or vegetable oil, animal oil, and/or body soil.
26. A method of preventing malodor from developing on fabric after a conventional washing process, said method comprising: adding to at least one step of said washing process an effective amount of malodor counteractant selected from the group consisting of: an effective amount to absorb malodors, of solubilized, uncomplexed cyclodextrin; an effective amount to diminish the perception of malodor of odor blocker; an effective amount of to react with and reduce odor of class I and/or class II aldehyde; an effective amount of flavanoid, and/or an effective amount of water soluble polymer.
27. An article of manufacture comprising a package containing a composition having an effective amount of malodor counteractant selected from the group consisting of: an effective amount to absorb malodors, of solubilized, uncomplexed cyclodextrin; an effective amount to diminish the perception of malodors of odor blocker; an effective amount to react with malodors of class I and/or class II aldehyde; an effective amount to reduce the effect of malodors of flavanoid, and/or an effective amount to react with malodors of water soluble anionic polymer in association with instructions for using said composition in a method of diminishing the effect of malodor that is present on fabric after a conventional washing process comprising adding said composition in an effective amount to at least one step of said washing process.
28. The article of Claim 27 wherein said composition comprises cyclodextrin.

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29. The article of Claim 28 wherein said instructions comprise the addition of said composition to provide at least about 20 ppm of cyclodextrin for normal levels of malodor and at least about 60 ppm of cyclodextrin for high levels of malodor.